Reg No.:_____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

SIXTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: CH304

Course Name: INORGANIC CHEMICAL TECHNOLOGY (CH)

Max. Marks: 100 Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks. Marks

1	a)	Describe the role of chemical industry in daily life.	(5)
	b)	Describe the manufacture of phosphoric acid by wet process with a neat flow diagram	(10)
2	a)	"Corrosion of process vessels and pipelines is one of the major engineering problems associated with chlorine manufacturing", recommend some precautionary measures to overcome the above statement.	(5)
	b)	With neat flow sheet explain the manufacture of Soda ash by Solvay process.	(10)
3	a)	Describe the manufacture of hydrogen with a neat flow diagram.	(7)
	b)	Describe the manufacture of sodium silicate with the help of a neat flow diagram	(8)

PART B

Answer any two full questions, each carries 15 marks.

4	a)	Describe the Kilns used in ceramic industry.	(5)
	b)	Explain in detail the typical manufacturing sequence of glass and list variety of glasses.	(10)
5	a)	With a neat flow diagram explain paint manufacturing.	(8)
	b)	Discuss the different types of refractories and its applications.	(7)
6	a)	List any five special glasses and their uses.	(5)
	b)	What are different types of pigments? Describe the manufacture of any one pigment with a neat flow diagram.	(10)

PART C

Answer any two full questions, each carries20 marks.

7	a)	What are the major role of nitrogen, phosphorus and potassium in fertilizers?	(5)
	b)	Discuss the major engineering problems encountered in urea manufacturing process.	(5)

	c)	Describe the manufacture of ammonia with neat sketch and list out its uses.	(10)
8	a)	What are the different types of Portland cement?	(5)
	b)	Explain the properties and uses of graphite?	(5)
	c)	Describe the manufacture of silicon carbide with the help of a neat flow diagram.	(10)
9	a)	With a neat flow diagram explain triple superphosphate fertilizer manufacturing.	(10)
	b)	With a neat flow diagram explain graphite manufacturing.	(10)

****